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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/478,737	01/06/2000	Patricia D. Wilson	A3275970165.0555	2081
21003	7590	03/09/2004	EXAMINER	
BAKER & BOTTS 30 ROCKEFELLER PLAZA NEW YORK, NY 10112			MURPHY, JOSEPH F	
			ART UNIT	PAPER NUMBER

1646

DATE MAILED: 03/09/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/478,737	Applicant(s) WILSON ET AL.	
	Examiner Joseph F Murphy	Art Unit 1646	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 January 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 21-37 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 24-29, 31-36 is/are allowed.
- 6) ☒ Claim(s) 21-23 is/are rejected.
- 7) ☒ Claim(s) 30 and 37 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Request for Continued Examination

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 1/20/2004 has been entered.

Formal Matters

Claims 21-37 are pending and under consideration.

Specification

The abstract of the disclosure is objected to because it is entitled "Abstract of the Invention". Pursuant to 37 CFR 1.72 a brief abstract of the technical disclosure in the specification must commence on a separate sheet, preferably following the claims, under the heading "Abstract " or "Abstract of the Disclosure". Correction is required. See MPEP § 608.01(b).

Claim Objections

Claims 30 and 37 stand objected to because of the following informalities: They are dependent on cancelled claims. Appropriate correction is required.

Response to Amendment

The rejection of claim 26 under 35 USC § 112 second paragraph has been obviated by Applicant's amendment and is thus withdrawn.

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Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 21-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wilson et al. (1996) in view of Van Adelsberg (1999), for reasons of record set forth in the Office Action of 2/11/2003. The references were cited and provided in that Office Action.

Wilson teaches the correlation between PKD-1 content and degree of adherence to type I collagen. Van Adelsberg teaches peptide inhibitors derived from the PKD repeats of polycystin-1 (page 301, Figure 1). It would have been obvious to one of skill in the art at the time the invention was made to measure adherence of polycystin-1 expressing cells to collagen type-1 in the presence of the inhibitory peptides derived from the PKD repeats of polycystin-1 as taught by Van Adlesberg, with a reasonable expectation of success. One of skill in the art at the time the invention was made would have been motivated to make this modification to determine if type I collagen is a ligand for polycystin-1.

Claims 21 and 23 of the instant application do not contain a limitation whereby the polycystin-1 used in the assay is a mutant polycystin-1, while claim 22 is drawn to screening methods using mutant polycystin-1. The Van Adelsberg reference teaches methods of measuring the effects of peptides derived from PKD-1 extracellular domain on polycystin-1 function, and screening those peptides for effect on ureteric bud branching morphogenesis. The Van Adelsberg reference further teaches that mutations in the PKD1 gene are responsible for about

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85% of autosomal dominant polycystic kidney disease (Van Adelsberg page 299, column 1, first paragraph). The Wilson reference also teaches that mutations in the PKD-1 gene causes autosomal dominant polycystic kidney disease, and further teaches assays to measure adherence of cells comprising PKD-1 to collagen type I, including assays using ADPKD epithelia which comprise mutant PKD-1. Given the screening method of Van Adelsberg, and the teaching of Wilson on measuring the adherence of PKD-1, including mutant PKD-1, to type I collagen, the combination of Van Adelsberg and Wilson references render it obvious to practice a method of identifying compounds which modulate polycystin-1, and mutant polycystin-1, mediated increase in adherence to Type I collagen.

Conclusion

Claims 24, 25, 26, 27, 28, 29, 31, 32, 33, 34, 35, 36 are allowable.

Claims 21-23 are rejected.

Claims 30 and 37 are objected to.

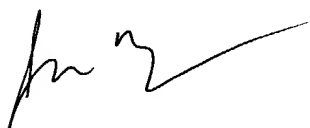
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Advisory Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph Murphy whose telephone number is (571) 272-0877. The examiner can normally be reached Monday through Friday from 7:30 am to 5:00 pm. A message may be left on the examiner's voice mail service. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Yvonne Eyler can be reached on (571) 272-0871.

The fax number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Joseph F. Murphy, Ph. D.
Patent Examiner
Art Unit 1646
February 24, 2004